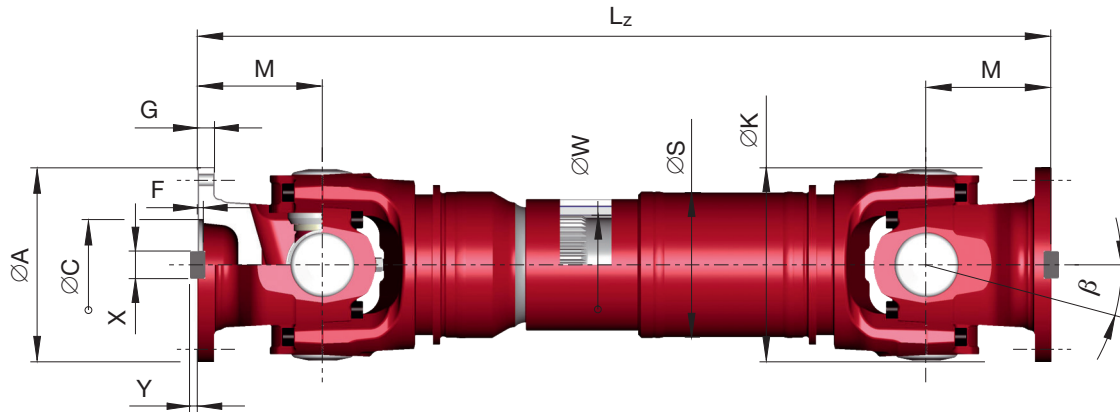


# Data sheet series 392/393 High torque capacity

0.01 with length compensation, tubular design  
 0.02 with large length compensation, tubular design  
 0.03 without length compensation, tubular design

9.01 with length compensation, short design  
 9.02 with length compensation, short design  
 9.03 with length compensation, short design  
 9.04 without length compensation, double flange shaft design

## Design



0.01

Shaft size		392.50	392.55	392.60	392.65	392.70	393.75	393.80	393.85	393.90
T <sub>CS</sub>	kNm	70	105	150	215	295	390	580	750	1.150
T <sub>DW</sub>	kNm	23	36	53	75	102	140	220	285	435
L <sub>c</sub>	–	7,8	25,7	84	265	695	1.700	7.070	15.550	61.550
β	°/γ	15	15	15	15	15	10	10	10	10
A	mm	225	250	285	315	350	390	435	480	550
K	mm	225	250	285	315	350	390	435	480	550
B	mm	196	218	245	280	310	345	385	425	492
C H7	mm	105	105	125	130	155	170	190	205	250
F <sup>1)</sup>	mm	4,5	5	6	7	7	8	10	12	12
G	mm	20	25	27	32	35	40	42	47	50
H	mm	17	19	21	23	23	25	28	31	31
I <sup>2)</sup>	–	8	8	8	10	10	10	16	16	16
M	mm	145	165	180	205	225	205	235	265	290
S	mm	167,7 x 9,8	218,2 x 8,7	219 x 13,3	273 x 11,6	273 x 19	273 x 36	323,9 x 36	355,6 x 40	406,4 x 45
X e9	mm	32	40	40	40	50	70	80	90	100
Y	mm	9	12,5	15	15	16	18	20	22,5	22,5
W DIN 5480	mm	120 x 2,5	150 x 3	150 x 3	185 x 5	185 x 5	185 x 5	210 x 5	240 x 5	240 x 5

T<sub>CS</sub> = Functional limit torque\*  
 Yield torque 30% over T<sub>CS</sub>

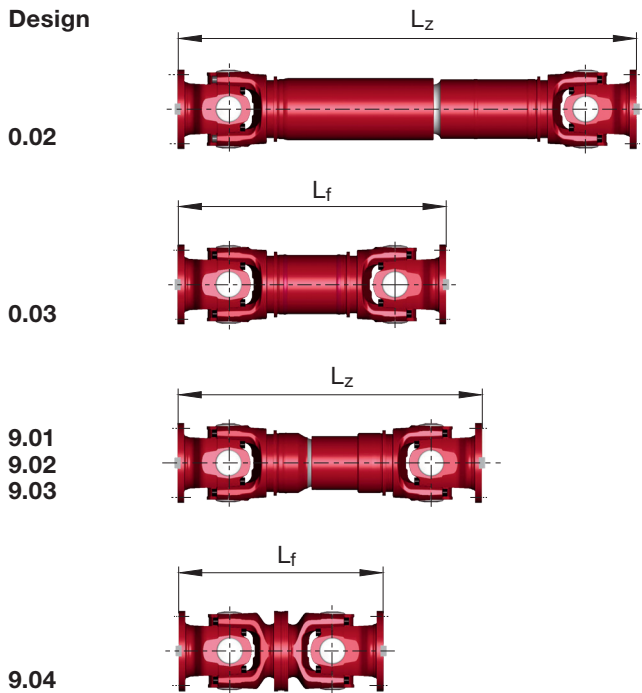
T<sub>DW</sub> = Reversing fatigue torque\*  
 L<sub>c</sub> = Bearing capacity factor\*

\* See specifications of driveshafts.  
 β = Maximum deflection angle per joint

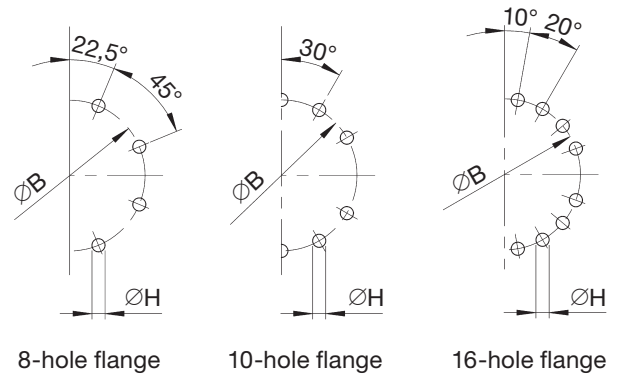
1) Effective spigot depth  
 2) Number of flange holes

# Data sheet series 392/393 High torque capacity

## Design



## Flange connection with face key



Each driveshaft size has a specific hole pattern (see table). Other hole patterns available on request.

Design	Shaft size	392.50		392.55	392.60	392.65	392.70	393.75	393.80	393.85	393.90	
<b>0.01</b>	L <sub>z min</sub>	mm	890	984	1.010	1.090	1.240	1.310	1.430	1.620	1.820	2.035
	L <sub>a</sub>	mm	110	140	135	135	170	170	170	170	190	210
	G	kg	142	148	214	272	406	493	732	1.055	1.477	2.209
	G <sub>R</sub>	kg	38,2	38,2	44,9	67,5	74,8	119,0	210,4	255,6	311,3	401,1
	J <sub>m</sub>	kgm <sup>2</sup>	1,02	1,02	1,43	2,23	3,8	6,5	11,72	17,84	25,26	40,76
	J <sub>mR</sub>	kgm <sup>2</sup>	0,239	0,239	0,494	0,717	1,28	1,93	3,02	5,38	7,88	13,3
	C	Nm/rad.	1,03 x 10 <sup>6</sup>	1,02 x 10 <sup>6</sup>	1,42 x 10 <sup>6</sup>	2,36 x 10 <sup>6</sup>	3,1 x 10 <sup>6</sup>	4,4 x 10 <sup>6</sup>	5,19 x 10 <sup>6</sup>	7,86 x 10 <sup>6</sup>	1,09 x 10 <sup>7</sup>	1,43 x 10 <sup>7</sup>
	C <sub>R</sub>	Nm/rad.	2,43 x 10 <sup>6</sup>	2,43 x 10 <sup>6</sup>	5,04 x 10 <sup>6</sup>	7,3 x 10 <sup>6</sup>	1,3 x 10 <sup>7</sup>	1,97 x 10 <sup>7</sup>	3,08 x 10 <sup>7</sup>	5,48 x 10 <sup>7</sup>	8,03 x 10 <sup>7</sup>	1,36 x 10 <sup>8</sup>
<b>0.02*</b>	L <sub>z min</sub>	mm	1.230	1.390	1.470	1.325	1.395	1.570	1.780	1.975	2.190	
	L <sub>a min</sub>	mm	300	300	300	250	250	310	330	350	365	
	G	kg	188	291	348	515	603	796	1.158	1.648	2.367	
	G <sub>R</sub>	kg	38,2	44,9	67,5	74,8	119,0	210,4	255,6	311,3	401,1	
<b>0.03</b>	L <sub>f min</sub>	mm	660	740	820	920	990	977	1.110	1.240	1.380	
	G	kg	101	156	215	301	389	538	748	1.052	1.600	
	G <sub>R</sub>	kg	38,2	44,9	67,5	74,8	119,0	210,4	255,6	311,3	401,1	
<b>9.01</b>	L <sub>z</sub>	mm	863	983	1.063	1.205	1.275	1.363	1.550	1.750	1.955	
	L <sub>a</sub>	mm	100	135	135	170	170	170	170	190	210	
	G	kg	130	210	269	402	487	718	1.037	1.446	2.177	
<b>9.02</b>	L <sub>z</sub>	mm	830	920	1.000	1.130	1.200	1.300	1.400	1.630	1.770	
	L <sub>a</sub>	mm	70	75	75	95	95	90	90	100	100	
	G	kg	124	204	263	375	466	641	876	1.325	1.717	
<b>9.03</b>	L <sub>z</sub>	mm	770	865	945	1.060	1.130	1.200	1.300	1.520	1.680	
	L <sub>a</sub>	mm	65	75	75	85	85	70	70	80	80	
	G	kg	123	197	260	371	457	602	832	1.000	1.657	
<b>9.04</b>	L <sub>f</sub>	mm	580	660	720	820	900	820	940	1.060	1.160	
	G	kg	94	145	207	288	391	485	653	890	1.443	

L<sub>z min</sub> = Shortest possible compressed length  
 L<sub>a</sub> = Length compensation  
 L<sub>f min</sub> = Shortest fixed length  
 L<sub>z</sub> + L<sub>a</sub> = Maximum operating length

G = Weight of shaft  
 G<sub>R</sub> = Weight per 1.000 mm tube  
 J<sub>m</sub> = Moment of inertia  
 J<sub>mR</sub> = Moment of inertia per 1.000 mm tube

C = Torsional stiffness of shaft without tube  
 C<sub>R</sub> = Torsional stiffness per 1.000 mm tube  
 \* Larger length compensation available on request